



"STEWARDSHIP IN FORESTRY"

Timber Sale Appraisal
Eagle
Sale KL-341-2025-W01027-01

District: Klamath/Lake

Date: May 10, 2024

Cost Summary

	Conifer	Hardwood	Total
Gross Timber Sale Value	\$224,441.99	\$0.00	\$224,441.99
		Project Work:	(\$28,293.25)
		Advertised Value:	\$196,148.74



Timber Sale Appraisal Eagle Sale KL-341-2025-W01027-01

District: Klamath/Lake

Date: May 10, 2024

Timber Description

Location:

Stand Stocking: 20%

Specie Name	AvgDBH	Amortization (%)	Recovery (%)
White Fir	15	0	98
Sugar Pine	1	0	98
Ponderosa Pine	18	0	98
Lodgepole Pine	11	0	95

Volume by Grade	2S	3S & 4S 6"-11"	6" - 11"	16"+	12"-15"	Camprun	Total
White Fir	527	461	0	0	0	0	988
Sugar Pine	0	0	5	13	0	0	18
Ponderosa Pine	0	0	377	345	394	0	1,116
Lodgepole Pine	0	0	0	0	0	53	53
Total	527	461	382	358	394	53	2,175

Comments: Pond Values Used: Local Pond Values, May 2024

Pulp Price: \$0.25 per ton

Log Markets: Klamath Falls and Medford.

Other Costs (no Profit & Risk): None

Other Costs (with Profit & Risk to be added): None

ROAD MAINTENANCE

Move-in: \$400.00

General Road Maintenance: 7 miles x \$270 per mile x 1 bladings = \$1,890.00

Total Road Maintenance: \$2,290.00, \$1.05 per Mbf



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Logging Conditions

Combination#: 1	White Fir	100.00%
	Sugar Pine	100.00%
	Ponderosa Pine	100.00%
	Lodgepole Pine	100.00%
Logging System:	Wheel Skidder	Process: Feller Buncher
yarding distance:	Medium (800 ft)	downhill yarding: Yes
tree size:	Small / Thinning 10in (90 Bft/tree), 18-20 logs/MBF	
loads / day:	12	bd. ft / load: 4800
cost / mbf:	\$173.62	
machines:	Log Loader (B)	
	Stroke Delimber (B)	
	Feller Buncher w/ Delimber	
	Tire Skidder	



"STEWARDSHIP IN FORESTRY"

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Logging Costs

Operating Seasons: 1.00	Profit Risk: 10%
Project Costs: \$28,293.25	Other Costs (P/R): \$0.00
Slash Disposal: \$0.00	Other Costs: \$0.00

Miles of Road

Road Maintenance: \$1.05

Dirt	Rock (Contractor)	Rock (State)	Paved
0.0	0.0	0.0	0.0

Hauling Costs

Species	\$ / MBF	Trips/Day	MBF / Load
White Fir	\$0.00	4.0	4.8
Sugar Pine	\$0.00	4.0	4.8
Ponderosa Pine	\$0.00	4.0	4.8
Lodgepole Pine	\$0.00	4.0	4.5



"STEWARDSHIP IN FORESTRY"

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District: Klamath/Lake

Date: May 10, 2024

Logging Costs Breakdown

Logging	Road Maint	Fire Protect	Hauling	Other P/R appl	Profit & Risk	Slash Disposal	Brand & Paint	Other	Total
White Fir									
\$173.62	\$1.07	\$2.02	\$66.40	\$0.00	\$24.31	\$0.00	\$2.00	\$0.00	\$269.42
Sugar Pine									
\$173.62	\$1.07	\$2.02	\$66.40	\$0.00	\$24.31	\$0.00	\$2.00	\$0.00	\$269.42
Ponderosa Pine									
\$173.62	\$1.07	\$2.02	\$66.40	\$0.00	\$24.31	\$0.00	\$2.00	\$0.00	\$269.42
Lodgepole Pine									
\$173.62	\$1.10	\$2.02	\$72.91	\$0.00	\$24.96	\$0.00	\$2.00	\$0.00	\$276.61

Specie	Amortization	Pond Value	Stumpage	Amortized
White Fir	\$0.00	\$433.13	\$163.71	\$0.00
Sugar Pine	\$0.00	\$336.94	\$67.52	\$0.00
Ponderosa Pine	\$0.00	\$322.45	\$53.03	\$0.00
Lodgepole Pine	\$0.00	\$320.00	\$43.39	\$0.00



Timber Sale Appraisal
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Date: May 10, 2024

Summary

Amortized

Specie	MBF	Value	Total
White Fir	0	\$0.00	\$0.00
Sugar Pine	0	\$0.00	\$0.00
Ponderosa Pine	0	\$0.00	\$0.00
Lodgepole Pine	0	\$0.00	\$0.00

Unamortized

Specie	MBF	Value	Total
White Fir	988	\$163.71	\$161,745.48
Sugar Pine	18	\$67.52	\$1,215.36
Ponderosa Pine	1,116	\$53.03	\$59,181.48
Lodgepole Pine	53	\$43.39	\$2,299.67

Gross Timber Sale Value

Recovery: \$224,441.99

Prepared By: Chris Weekly

Phone: 541-883-5681

Eagle
KL-341-2025-W01027-01

Other Costs

Road Maintenance

Move-in cost (grader):	\$400.00
Number of Miles to be Bladed:	7
Number of Bladings:	1
Total Miles:	7
Miles/Hour for Equipment:	0.5
Cost/Hour (grader with operator):	\$135.00
Total Grading Hours:	14
Grading Cost:	\$1,890.00
Total Cost:	\$2,290.00
Cost/Mbf:	\$1.05

PP	1,116 Mbf	51%	Average Load	4.0 Mbf	No. of Loads	279
WF	987 Mbf	45%	Average Load	4.0 Mbf	No. of Loads	247
LP	53 Mbf	2%	Average Load	4.0 Mbf	No. of Loads	13
SP	17 Mbf	1%	Average Load	4.0 Mbf	No. of Loads	4
Total:	2,173 Mbf				Total Loads	543

Assume: 4 Trucks/Day
3 Trips/Day
12 Loads per Day
45 Hauling Days

Eagle
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Project Costs

Project #1 Road Improvement

Improvement

Move in Cost Cat: \$500

	Points	Distance(ft)	Feet/Hour	Hours	Cost/Hour	Cost
Open/Clear/Shape	A to B	5,966	1000	5.97	\$150.00	\$894.90
Open/Clear/Shape	C to D	1,515	1000	1.52	\$150.00	\$227.25
Open/Clear/Shape	E to F	3,339	1000	3.34	\$150.00	\$500.85
Open/Clear/Shape	G to H	15,211	1000	15.21	\$150.00	\$2,281.65
Open/Clear/Shape	I to J	8,924	1000	8.92	\$150.00	\$1,338.60
	Total	34,955		34.96		\$5,243.25

Move In Costs	\$500.00
Improvement Cost	\$5,243.25
Project # 1 Total	\$5,743.25
per Mbf	\$2.64

Project #2 Fell, Skid, Deck Submerchantable Material

Total Sub-Sawlog Volume: 77 Mbf

Fell and Skid/MBF:	\$70.00
Sort/MBF:	\$30.00
Total	\$7,700.00
per MBF	\$3.54

Landing Slash Piling

Number of Landings: 32

Shovel Time:	1 Hour per Landing	Cost per Hour: \$150.00	Total Cost	\$4,800.00
Cat Time:	1 Hour per Landing	Cost per Hour: \$150.00	Total Cost	\$4,800.00
		Total	\$9,600.00	
		per Mbf	\$4.42	

Eagle
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Project Costs

Project #2 Summary

Fell, Skid, Deck Submerch.	\$7,700.00
Slash Piling	\$9,600.00
Total	\$17,300.00
per Mbf	\$7.96

Project #3 Road Closures and Waterbarring

Road Closures

3	Number of Closure Points	G, H, E
\$150.00	Cost per Hour (Cat)	
\$450.00	Total	
\$0.21	per Mbf	

Skid Trail Waterbarring

16	Number of Landings
2	Hours per Landing
\$150.00	Cost per Hour (Cat)
\$4,800.00	Total
\$2.21	per Mbf

Project #3 Summary

Road Closures:	\$450.00
Waterbarring:	\$4,800.00
Total:	\$5,250.00
per Mbf:	\$2.42

Cost Summary All Projects

Project No.1 - Road Improvement	\$5,743.25
Project No.2 - Fell, Skid, Deck Submerchable Material	\$17,300.00
Project No.3 - Road Closure and Waterbarring	\$5,250.00
Total Cost	\$28,293.25
per Mbf	\$13.02

Eagle
KL-341-2025-W01027-01
Cruise Report



SALE NAME: Eagle
8421S

LEGAL DESCRIPTION:

Located in Section(s) 1 of T33S, R7½E, Section(s) 25, 35 and 36 T32S, R7½E, Willamette Meridian, Klamath County, Oregon

BOUNDARY LINES:

Property lines are flagged in orange and marked with Timber Sale Boundary tags other sale boundaries are unmarked.

ACREAGE:

Gross Sale Acreage:	739 Acres
Exclusion Acreage:	91 Acres
Net Sale Acreage:	648 Acres

Mapping was accomplished using Avenza pdf Maps with the data processed through ArcMap.

TREATMENT:

Unit 1 of the Timber Sale is a cut tree mark single tree selection with cut trees marked with blue paint. Unit 2 is a leave tree mark single tree selection with leave trees marked with orange paint.

CRUISE METHOD:

Variable plot cruise with a ratio of one count plot for every measure plot.

BASAL AREA FACTOR:

A basal area factor of 10 was used for all variable cruise plots.

PLOT DESIGNATION:

Plot centers were established at every plot with blue flag wire stakes with the corresponding plot number. Blue and white striped flagging was attached to the nearest available tree branch.

SAMPLE SIZE CALCULATIONS:

CV%	DESIRED SE%	ACRES
90%	12%	648

$$\text{Number of Plots} = \frac{T^2 C^2}{A^2}$$

C = Coefficient of Variation in Percent (Taken from inventory data)

T = Number of Standard Errors

A = Desired Sampling Error for a sale of this size and value

$$N = \frac{(1)^2(90)^2}{(12)^2} = 56 \text{ plots}$$

Measurements and Grading:

- Ratio of one count plot for every measure plot.
- DBH and Height were measured on all “in” trees for measure plots.
- Pulp volume and sawlog volume cruised.
- All trees were graded using the segment system.
- Nested fixed plot cruise for all submerchantable material in unit 2 (5” to 9” DBH).

TREE HEIGHT:

All trees were measured to a fixed diameter outside bark. This height is usually taken as high up the bole as possible, where the cruiser can clearly see the bole, and the taper remains constant (usually 6 or 8 inches). The log segments are broken out and graded accordingly.

MINIMUM D.B.H:

9.0” DBH.

DIAMETER STANDARDS:

1” diameter class

BTR:

Standard ratios were used. See attached species tables.

FORM FACTOR:

Form factor was measured or estimated at 16' for each tree. Each tree was assigned its own FF.

FORM POINT:

All trees were sighted at DBH.

VOLUME COMPUTATION:

All cruise data was input and run at the district on Atterbury's Super Ace program.

FINAL CRUISE RESULTS:

CV%	SE%	ACRES
65.7	8.9	648

TIMBER DESCRIPTION**SAWLOG VOLUME:**

This volume was obtained from the variable plot cruise. All material graded camprun. See grade table for minimum standards.

TOTAL SAWLOG VOLUME

Species	Ave. DBH	Acres	Gross Vol/Acre (bf)	Net Vol/Acre (bf)	Net Sale Vol (Mbf)
Ponderosa pine	18.3	648	1,734	1,722	1,116
White fir	14.8	648	1,535	1,523	988
Lodgepole pine	10.6	648	91	82	53
Sugar pine	30.7	648	29	27	18
		Total	3,389	3,354	2,173

TOTAL NET SAWLOG VOLUME: 2,173 MBF

GREEN PULP VOLUME:

This volume was obtained from the fixed plot cruise. All material was graded green pulp, see grade table for minimum standards.

FIXED PLOT CRUISE

Species	Ave. DBH	Acres	Net Vol/Acre (bf)	Net Sale Vol (Mbf)
White fir	7.4	60	667	40
Ponderosa pine	8.5	60	333	20
Lodgepole pine	6.4	60	167	10
Shasta fir	8.1	60	111	7
		Total	1,278	77

TOTAL GREEN PULP VOLUME: 77 Mbf

TC TLOGSTVB				Log Stock Table - MBF																					
				Project: EAGLE																					
T032 R007 S36 TVARI												T032 R007 S36 TVARI													
Twp	Rge	Sec	Tract			Type	Acres	Plots	Sample Trees				Page		1										
032	007	36	190			VARI	648.00	55	82				Date		6/5/2024										
												Time		1:36:57PM											
Spp	S	So	Gr	Log	Len	Gross MBF	% Def	Net MBF	% Spc	Net Volume by Scaling Diameter in Inches															
										2-3	4-5	6-7	8-9	10-11	12-13	14-15	16-19	20-23	24-29	30-39	40+				
PP	CR	CR	12			11		11	1.0						11										
PP	CR	CR	16			147	2.0	144	12.9			22	53	14	11		14	15	16						
PP	CR	CR	20			42		42	3.8				4			16	23								
PP	CR	CR	24			18		18	1.6				18												
PP	CR	CR	28			16		16	1.4				16												
PP	CR	CR	32			889	.5	885	79.3			17	113	120	217	139	86	163	28						
PP					Totals	1,123		1,116	51.3			40	204	134	227	166	122	178	44						
WF	CR	CR	17			152	3.4	147	14.9			52	29	26	16		24								
WF	CR	CR	27			83		83	8.4			37	26	20											
WF	CR	CR	34			760	.3	757	76.7			106	71	94	169	114	113	91							
WF					Totals	995		987	45.4			195	126	140	185	114	137	91							
LP	CR	CR	16			33	17.3	27	50.9				27												
LP	CR	CR	32			26		26	49.1			26													
LP					Totals	59	9.6	53	2.5			26	27												
SP	CR	CR	32			19	7.4	17	100.0					5				13							
SP					Totals	19	7.4	17	.8					5				13							
Total All Species						2,196	1.0	2,173	100.0			261	357	278	412	280	259	282	44						

TC TSTATS				STATISTICS				PAGE	1	
				PROJECT	EAGLE	DATE 6/5/2024				
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt	
032	007	36	190	VARI	648.00	55	171	1	E	
				TREES	ESTIMATED	PERCENT				
				PER PLOT	TOTAL	SAMPLE				
					TREES	TREES				
TOTAL			55	171	3.1					
CRUISE			22	82	3.7	14,534	.6			
DBH COUNT										
REFOREST										
COUNT			28	89	3.2					
BLANKS			5							
100 %										
STAND SUMMARY										
SAMPLE			TREES	AVG	BOLE	REL	BASAL	GROSS	NET	GROSS
TREES			/ACRE	DBH	LEN	DEN	AREA	BF/AC	BF/AC	CF/AC
P PINE			47	8.4	18.3	43	3.6	15.5	1,734	1,722
WHITE F			31	11.9	14.8	37	3.7	14.2	1,535	1,523
LP PINE			3	2.1	10.6	28	0.4	1.3	91	82
SUG PINE			1	.0	30.7	76	0.0	.2	29	27
TOTAL			82	22.4	15.9	38	7.8	31.1	3,388	3,354
CONFIDENCE LIMITS OF THE SAMPLE										
68.1 TIMES OUT OF 100 THE VOLUME WILL BE WITHIN THE SAMPLE ERROR										
CL:	68.1 %	COEFF		SAMPLE TREES - BF				# OF TREES REQ.		INF. POP.
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5		10	15
P PINE			95.1	13.9	321	373	425			
WHITE F			108.5	19.5	202	250	299			
LP PINE			58.1	40.2	26	43	61			
SUG PINE										
TOTAL			102.7	11.3	283	319	355	421	105	47
CL:	68.1 %	COEFF		SAMPLE TREES - CF				# OF TREES REQ.		INF. POP.
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5		10	15
P PINE			81.5	11.9	63	71	80			
WHITE F			96.0	17.2	42	51	60			
LP PINE			48.1	33.3	7	11	15			
SUG PINE										
TOTAL			89.1	9.8	56	63	69	317	79	35
CL:	68.1 %	COEFF		TREES/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5		10	15
P PINE			145.4	19.6	7	8	10			
WHITE F			167.8	22.6	9	12	15			
LP PINE			373.9	50.4	1	2	3			
SUG PINE			741.6	99.9	0	0	0			
TOTAL			93.6	12.6	20	22	25	350	87	39
CL:	68.1 %	COEFF		BASAL AREA/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5		10	15
P PINE			120.6	16.2	13	15	18			
WHITE F			150.3	20.3	11	14	17			
LP PINE			372.1	50.1	1	1	2			
SUG PINE			741.6	99.9	0	0	0			
TOTAL			68.0	9.2	28	31	34	185	46	21
CL:	68.1 %	COEFF		NET BF/ACRE				# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR. %	S.E. %	LOW	AVG	HIGH	5		10	15
P PINE			116.0	15.6	1,453	1,722	1,991			
WHITE F			145.4	19.6	1,224	1,523	1,821			
LP PINE			377.6	50.9	40	82	124			
SUG PINE			741.6	99.9	0	27	53			
TOTAL			65.7	8.9	3,057	3,354	3,651	173	43	19

TC TSTATS				STATISTICS			PAGE	2	
				PROJECT	EAGLE		DATE	6/5/2024	
TWP	RGE	SECT	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
032	007	36	190	VARI	648.00	55	171	1	E
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.	S.E.%	LOW	AVG	HIGH	5	10	15
CL:	68.1 %	COEFF		NET CUFT FT/ACRE			# OF PLOTS REQ.		INF. POP.
SD:	1.0	VAR.%	S.E.%	LOW	AVG	HIGH	5	10	15
P PINE		116.6	15.7	298	353	409			
WHITE F		145.6	19.6	270	336	402			
LP PINE		375.3	50.6	11	21	32			
SUG PINE		741.6	99.9	0	5	10			
TOTAL		65.1	8.8	653	716	779	169	42	19

Logging Plan
of Timber Sale Contract
KL-341-2025-W1027-01
Eagle
Located in Section(s) 1 of
T33S, R7.5E, Section(s) 25,
35, and 36 of T32S, R7.5E,
Willamette Meridian,
Klamath County, Oregon

